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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,291	03/27/2002	Lorenz Feddersen	1175/66964	9372

7590 07/02/2003
PROF MENSING STRASSE II
24937
FLENSBURG,
GERMANY

EXAMINER

CUEVAS, PEDRO J

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 07/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/089,291

Applicant(s)

FEDDERSEN, LORENZ

Examiner

Pedro J. Cuevas

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6/02.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other.

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(b) because they are incomplete. 37

CFR 1.83(b) reads as follows:

When the invention consists of an improvement on an old machine the drawing must when possible exhibit, in one or more views, the improved portion itself, disconnected from the old structure, and also in another view, so much only of the old structure as will suffice to show the connection of the invention therewith.

2. The drawings are objected to because Figures 3 and 4 do not contain any label identifying the shown parts of the claimed invention, and their structural relationships.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Wind Power Plant Having Rotation Speed Adjustment According to Magnetic Field Variation.

Claim Objections

5. Claim 1 is objected to because of the following informalities: crossed out and handwritten words are present in the claim. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 1-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Claim 1 recites the limitation "the driving shaft". There is insufficient antecedent basis for this limitation in the claim.

9. The terms "n" in claims 1 and 9, and "relatively high speed" in claim 7 are relative terms, which render the claims indefinite. The terms "n" and "relatively high speed" are not defined by the claims, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,083,039 to Richardson et al. in view of U.S. Patent No. 4,926,105 to Mischenko et al.

Richardson et al. disclose the construction of a variable speed wind turbine (12) having a driving shaft which communicates with a multi-polar synchronous generator (16, 18) through a gear (14) and with a transformer (36) having n output windings (at least one), said transformer

Art Unit: 2834

coupled in series with n rectifiers so as to obtain an HVDC, and communicating through an AC/DC rectifier (20, 22) with an HVDC transmission cable (utility grid), and measures being taken (by inverter controllers 50 and 52) so as to secure against possible variations in the speed of rotation, where the rotor rotate at a high speed thereby further reducing the inductance.

However, it fails to disclose a magnetic field controller connected to the generator, wherein said magnetic field controller:

varies the magnetic field in be synchronous generator in response to a speed of rotation-depending output parameter of said generator in such a manner that possible variations in the speed of rotation are compensated for, whereby the AC/DC rectifier is composed of diodes;

detects the voltages generated by be synchronous generator, a negative feedback being established for regulating the current through be rotor winding; and

detects the power generated by the generator, a negative feedback being established for regulating the current through the rotor winding in response to the detected power, including a combination of P, I or D regulation.

Mischenko et al. teach the construction of a method of induction motor control and electric drive realizing this method having a magnetic field controller connected to the generator, wherein said magnetic field controller:

varies the magnetic field in be synchronous generator in response to a speed of rotation-depending output parameter of said generator in such a manner that possible variations in the speed of rotation are compensated for, whereby the AC/DC rectifier is composed of diodes;

detects the voltages generated by the synchronous generator, a negative feedback being established for regulating the current through the rotor winding; and
detects the power generated by the generator, a negative feedback being established for regulating the current through the rotor winding in response to the detected power, including a combination of P, I or D regulation,
for the purpose of achieving the maximum possible torque of the induction motor when it operates at a limited stator current amplitude or a limited stator voltage amplitude.

It would have been obvious to one skilled in the art at the time the invention was made to use the method of induction motor control disclosed by Mischenko et al. on the variable speed wind turbine disclosed by Richardson et al. for the purpose of achieving the maximum possible torque of the induction motor when it operates at a limited stator current amplitude or a limited stator voltage amplitude.

Also, it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. In re Hutchison, 69 USPQ 138.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

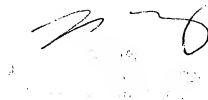
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pedro J. Cuevas whose telephone number is (703) 308-4904. The examiner can normally be reached on M-F from 8:30 - 6:00.

Art Unit: 2834

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor R. Ramírez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-1341 for regular communications and (703) 305-3432 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Pedro J. Cuevas
June 26, 2003

A handwritten signature in black ink, appearing to read 'Pedro J. Cuevas', is located in the lower right quadrant of the page. The signature is stylized with a large, sweeping 'P' and a distinct 'C'.